

AMENDMENT TO THE CLAIMS

Please cancel claim 12.

Please amend claims 1, 10, 13, 14, 18, and 23 as shown below.

1. (Currently Amended) A method for providing end-to-end QoS for applications running in multiple transport protocol environments which comprises:

- formulating a query message at a client machine, said query message containing a source IP address and a QoS profile requirement of a user application and data requesting information indicating the availability of PVC connections and SVC connections at the server;
- sending the query message to a server machine;
- decoding the query message at the server machine;
- in response to the decoded query message, determining availability of PVC connections and SVC connections at the server;
- ~~determining availability of SVC connections at the server;~~
- formulating a response message at the server machine, said response message containing server information and the availability of the PVC connections and the SVC connections the response message including a virtual path identification (VPI) or a virtual channel identifier (VCI) if a PVC connection is available at the server;
- sending the response message to the client machine;
- decoding the response message at the client machine; and
- connecting the client machine to the server machine using either the PVC connection or the SVC connection based upon the response message.

2. (Original) The method of claim 1, further comprising:

- connecting the client machine to the server machine using the PVC connection when the response message indicates that the PVC connection is available.

3. (Original) The method of claim 2, further comprising:

- connecting the client machine to the server machine using the SVC connection when the response message indicates that the SVC connection is available.

4. (Previously Presented) The method of claim 1, further comprising:
receiving additional response messages from the server;
extracting server information stored in the additional response messages;
and
storing the server information in a connection database at the client
machine.

5. (Original) The method of claim 4 further comprising repeating the
steps of claim 4 until a server having the QoS profile has been identified.

6. (Original) The method of claim 5 further comprising connecting the
client machine to the server having the desired QoS profile.

7-9. (Canceled)

10. (Currently Amended) An apparatus for providing end-to-end QoS
for a client application which comprises:

a QoS selector located at a client machine, the QoS selector configured to
gather client application QoS requirements and to formulate connection requests;

a second QoS selector located at a server machine, the second QoS
selector configured to receive the connection requests and to formulate connection
responses indicating multiple connection availability comprising PVC connection
availability and SVC connection availability, the connection response including a virtual
path identifier (VPI) or a virtual channel identifier (VCI) if a PVC connection is available
at the server machine;

means for storing server information at the client machine the stored
information, including the VPI or VCI data if a PVC channel is available at the server
machine; and

connection means located at the client machine, said connection means receiving the connection response and connecting the client application to the server machine based upon the connection response.

11. (Previously Presented) The apparatus of claim 10, wherein the first QoS selector is configured to store an IP address of the client machine in the connection request.

12. (Canceled)

13. (Currently Amended) The apparatus of claim ~~[[12]]~~11, wherein the second QoS selector is configured to store an ATM address of the server machine when an SVC connection exists at the server machine.

14. (Currently Amended) The apparatus of claim ~~[[13]]~~10, wherein the connection means establishes a PVC connection between the client machine and the server machine when the VPI/VCI connection pair values are detected in the connection response.

15. (Original) The apparatus of claim 14, wherein the connection means establishes an SVC connection between the client machine and the server machine when the ATM address is detected in the connection response.

16. (Original) The apparatus of claim 15, wherein the storage means extracts ATM connection information, server mapping information, server QoS information, and server address information from the connection response.

17. (Original) The apparatus of claim 16, wherein the storage means stores the ATM connection information, server mapping information, server QoS information, and server address information in a connection database.

18. (Currently Amended) A method comprising:
receiving a message from a plurality of servers in response to a query message, the message containing service indicator data indicative of multiple levels of service provided by the respective server and including a virtual path indicator (VPI) or a virtual channel indicator (VCI) if the respective server has a PVC connection available;
storing the service indicator data; and
sending a message to a client machine to indicate the availability of one or more of the plurality of servers to provide a level of service required by a client application.

19. (Previously Presented) The method of claim 18 wherein the service indicator data indicates the availability of the level of service at the respective server.

20. (Previously Presented) The method of claim 18 wherein the service indicator data indicates the availability of PVC connections and SVC connections at the respective server.

21. (Previously Presented) The method of claim 18 wherein the service indicator data indicates the Quality of Service availability at the respective server.

22. (Previously Presented) The method of claim 18, further comprising selecting a server for communication with the client application based at least in part on the service indicator data.

23. (Currently Amended) A method comprising:
formulating a query message at a client machine containing a service level requirement of a client application and requesting data indicative of the availability of PVC and SVC connections at each of the plurality of server machines;
sending the query message to a plurality server machines;

receiving a response message from at least a portion of the plurality of server machines in response to the query message, the response message containing data indicative of multiple levels of service provided by the respective server machine and including PVI or PCI data value if a PVC connection is available at the respective server machine; and

connecting the client machine to a selected one of the server machines based at least in part upon the response message.

24. (Previously Presented) The method of claim 23 wherein the query message includes a source IP address.

25. (Previously Presented) The method of claim 23 wherein the data in the response message indicates the availability of PVC connections and SVC connections at the respective server.

26. (Previously Presented) The method of claim 23 wherein the data in the response message indicates the Quality of Service availability at the respective server.

27. (Previously Presented) The method of claim 23 wherein connecting the client machine to the server machine comprises connecting the client machine to the server machine using a PVC connection when the response message indicates that the PVC connection is available.

28. (Previously Presented) The method of claim 23 wherein connecting the client machine to the server machine comprises connecting the client machine to the server machine using a SVC connection when the response message indicates that the SVC connection is available.

29-43. (Canceled)